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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,189	10/16/2003	Nagarajan Subramaniyan	ATEC-P011/SNG-031A	7571

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EXAMINER	
SERRAO, RANODHI N	
ART UNIT	**PAPER NUMBER**
2141	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,189	SUBRAMANIYAN, NAGARAJAN	
	Examiner	Art Unit	
	Ranodhi Serrao	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

2. The applicant argued in substance the newly added limitations of claims 1-24. However, the new grounds teach these and the added features. See rejections below.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boucher et al. (6,247,060) and Anand et al. (2002/0062333).

5. As per claim 1, Boucher et al. teaches a method for establishing a connection between a first device and a second device, said first device comprising a first protocol driver, a first application, a first socket layer disposed between said first protocol driver and said first application, and a first NIC driver, said second device comprising a second NIC driver (see Boucher et al., col. 20, lines 10-35), said method comprising: providing a first filter between said first socket layer and said first protocol driver (see Boucher et al., col. 53, lines 19-30), said first filter being external to said first NIC driver and first NIC hardware that is driven by said first NIC driver (see Boucher et al., col. 53, lines 31-47); providing a first offload hardware in said first device (see Boucher et al., col. 24, lines 52-58); providing a second filter in said second device (see Boucher et al., col. 14,

line 57-col. 15, line 6); receiving, using said first filter, a request from said first application through said first socket layer (see Boucher et al., col. 53, lines 35-54); examining, using said first filter, a transport handle in said request to determine whether said connection is an offload connection (see Boucher et al., col. 53, line 55-col. 54, line 29). But fails to teach processing said request to produce a packet set, said processing being performed by said first offload hardware if said connection is an offload connection, said processing being performed by said first protocol driver if said connection is not said offload connection, said packet set including one or more ordered packets; sending, using said first NIC driver and said first NIC hardware, said packet set to said second device; determining, using said second NIC driver, whether said packet set contains an offload transport handle; and passing said packet set to said second filter if said packet set contains said offload transport handle. However, Anand et al. teaches processing said request to produce a packet set, said processing being performed by said first offload hardware if said connection is an offload connection (see Anand et al., ¶ 41), said processing being performed by said first protocol driver if said connection is not said offload connection, said packet set including one or more ordered packets (see Anand et al., ¶ 43); sending, using said first NIC driver and said first NIC hardware, said packet set to said second device (see Anand et al., ¶ 53); determining, using said second NIC driver, whether said packet set contains an offload transport handle (see Anand et al., ¶ 54); and passing said packet set to said second filter if said packet set contains said offload transport handle (see Anand et al., ¶ 58). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify

Boucher et al. to processing said request to produce a packet set, said processing being performed by said first offload hardware if said connection is an offload connection, said processing being performed by said first protocol driver if said connection is not said offload connection, said packet set including one or more ordered packets; sending, using said first NIC driver and said first NIC hardware, said packet set to said second device; determining, using said second NIC driver, whether said packet set contains an offload transport handle; and passing said packet set to said second filter if said packet set contains said offload transport handle in order to free up host processor resources and increasing the overall efficiency of the computer system (see Anand et al., ¶ 3).

6. As per claim 2, Boucher-Anand teach a method, wherein said second filter is provided between a second socket layer and a second protocol driver in said second device (see Boucher et al., col. 37, lines 6-46).

7. As per claims 3, 4, 9-13, 22, and 23, the above-mentioned motivation of claim 1 applies fully in order to combine Boucher et al. and Anand et al.

8. As per claim 3, Boucher-Anand teach a method, wherein said first offload hardware is implemented in said first NIC hardware (see Anand et al., ¶ 14).

9. As per claim 4, Boucher-Anand teach a method, wherein said processing is performed by said first protocol driver if said connection is an IPsec connection (see Anand et al., ¶ 63).

10. As per claim 5, Boucher-Anand teach a method, wherein said transport handle pertains to at least one of hardware capabilities of said first device and a routing table (see Boucher et al., col. 44, lines 28-63).

11. As per claim 6, Boucher-Anand teach a method, wherein at least one of said first protocol driver and said second protocol is configured for processing a transport protocol (see Boucher et al., col. 14, lines 4-26).

12. As per claim 7, Boucher-Anand teach a method, wherein at least one of said first protocol driver and said second protocol is configured for processing TCP (see Boucher et al., col. 14, line 57-col. 15, line 6).

13. As per claim 8, Boucher-Anand teach a method, at least one of said first protocol driver and said second protocol is configured for processing IP (see Boucher et al., col. 14, line 57-col. 15, line 6).

14. As per claim 9, Boucher-Anand teach a method, further comprising providing a second offload hardware in said second device, said second offload hardware configured for re-assembling said packet set into a data stream (see Anad et al., ¶ 47).

15. As per claim 10, Boucher-Anand teach a method, wherein said determining includes detecting at least one of a connection establishment handshake and a handshake termination between said first device and said second device (see Anad et al., ¶ 49).

16. As per claim 11, Boucher-Anand teach a method, wherein said determining includes using said second filter (see Anand et al., ¶ 50).

17. As per claim 12, Boucher-Anand teach a method, wherein said first protocol driver is supplied with an operating system of said first device and without being modified (see Anand et al., ¶ 6).

18. As per claim 13, Boucher et al. teaches an apparatus comprising: an application; a socket layer (see Boucher et al., col. 37, lines 7-46); a filter configured to receive a request from said application through said socket layer and to examine a transport handle in said request for determining whether a connection pertaining to said request is an offload connection (see Boucher et al., col. 37, line 48-col. 38, line 7); wherein said filter is disposed between said socket layer and said protocol driver and external to said NIC driver and said NIC hardware (see Boucher et al., col. 52, lines 50-67). But fails to teach a protocol driver configured to process said request into a packet set if said connection is not said offload connection, said packet set including one or more ordered packets; an offload hardware configured to process said request into said packet set if said connection is said offload connection; a NIC driver configured to transmit said packet set; and NIC hardware driven by said NIC driver. However, Anand et al. teaches a protocol driver configured to process said request into a packet set if said connection is not said offload connection, said packet set including one or more ordered packets (see Anand et al., ¶ 16); an offload hardware configured to process said request into said packet set if said connection is said offload connection (see Anand et al., ¶ 57); a NIC driver configured to transmit said packet set; and NIC hardware driven by said NIC driver (see Anand et al., ¶ 38). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Boucher et al. to a protocol driver

configured to process said request into a packet set if said connection is not said offload connection, said packet set including one or more ordered packets; an offload hardware configured to process said request into said packet set if said connection is said offload connection; a NIC driver configured to transmit said packet set; and NIC hardware driven by said NIC driver in order to free up host processor resources and increasing the overall efficiency of the computer system (see Anand et al., ¶ 3).

19. As per claim 22, Boucher-Anand teach an apparatus, wherein said NIC driver is further configured to determine whether an incoming packet set contains an offload transport handle and to, if said incoming packet set contains said offload transport handle, pass said incoming packet set to said filter (see Anand et al., ¶ 58).

20. As per claim 23, Boucher-Anand teach an apparatus, wherein said filter is further configured to determine whether an incoming packet set contains an offload transport handle (see Anand et.al., ¶ 58).

21. Claims 14-21 and 24 have similar limitations as to claims 1-12, 22, and 23; therefore they are being rejected under the same rationale.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER